

Docket No.: 0145P32US02

15

What is claimed is:

1. A security cable for an intrusion detection system comprising:
  - an optical fiber sub-cable for carrying an optical signal having terminations at a source and a detector of a processor;
  - a communications sub-cable for providing data communications;
  - a pair of power conductors for distributing power;
  - an overjacket for encasing said first optical fiber sub-cables and said pair of power conductors;
  - a central filler for providing strength to said perimeter security cable; and
  - strength members provided between said central filler and said overjacket for providing a tight structure to said security cable;wherein local vibrations of said optical fiber sub-cable by an intrusion produce an optical parameter change so as to enable detection along the length of said security cable by said processor.
2. The security cable as claimed in **Claim 1** wherein said data communications are for a communications system external to said intrusion detection system and said security cable serves primarily to provide for secure communications.
3. The security cable as claimed in **Claim 1** further including an additional optical fiber sub-cable for accommodating additional communications and said security cable serves primarily to provide for secure communications.
4. The security cable as claimed in **Claim 1** wherein said data communications are for said intrusion detection system and said security cable serves primarily to provide for perimeter security.

Docket No.: 0145P32US02

16

5. The security cable as claimed in **Claim 1** wherein said pair of power conductors are for distributing power to said intrusion detection system and said security cable serves primarily to provide for perimeter security.

6. The security cable as claimed in **Claim 1** wherein said pair of power conductors are for distributing power external to said intrusion detection system and said security cable serves primarily to provide for power distribution.

7. The security cable as claimed in **Claim 1** wherein said data communications are for both said intrusion detection system and a communications system external to said intrusion detection system and said security cable serves both to provide for secure communications and to provide for perimeter security.

8. The security cable as claimed in **Claim 1** wherein  
said data communications are for both said intrusion detection system and a communications system external to said intrusion detection system,  
said pair of power conductors are for distributing power to both said intrusion detection system and external to said intrusion detection system, and  
said security cable serves to provide for combined power distribution, secure communications, and perimeter security.